respect to the other field magnet.

8. (Amended) The dynamo-electric machine according to claim 1, wherein the first field magnet and the second field magnet can move freely with respect to the shaft in axial and rotation directions, and the screw functions are provided by forming a screw portion in the shaft and nut portions inside the first and the second field magnets to form the mechanism for shifting both of the field magnets in axial and rotation directions.

9. (Amended) The dynamo-electric machine according to claim 1, whereinone field magnet is fixed to the shaft and the other field magnet can move freely with respect to the shaft, and the screw functions are provided by forming a screw portion in the shaft and nut portions inside the other field magnet to form the mechanism for shifting one field magnet with respect to the other field magnet.

10. (Amended) The dynamo-electric machine according to claim 8, wherein at least one field magnet can move freely with respect to the shaft, the screw functions are provided by forming a screw portion in the shaft and nut portions inside the other field magnet,and a stopper is provided at the position spaced from the side of said movable field

magnet.

12. (Amended) The dynamo-electric machine according to claim 1, wherein the phase lead of the current-feed by the controller for controlling said power converter is corrected according to the displacement of the position of a resultant magnetic pole of said first field magnet and said second field magnet.

13. (Amended) The dynamo-electric machine according to claim 1, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, the screw functions are provided by forming a screw portion in the shaft and nut portions inside said field magnet, the magnitude of the displacement in an axial direction of said movable field magnet is detected, and the phase lead of the current-feed by the controller for controlling said power converter is corrected according to the displacement of the position of a resultant magnetic pole of said first field magnet and said second field magnet.

14. (Amended) The dynamo-electric machine according to claim 1, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of support mechanisms for guiding the rotary motion, and whereby the reciprocal motion and

the compound movement are provided between said movable field magnet and said shaft.

15. (Amended) The dynamo-electric machine according to claim 1, wherein said movable field magnet and a sleeve are fixed through the sleeve between the inside of said movable field magnet and the shaft.

17. (Amended) The dynamo-electric machine according to claim 1, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of springs provided before and behind said field magnet, for guiding the rotary motion, the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

18. (Amended) The dynamo-electric machine according to claim 1, wherein said the first field magnet are fixed to the shaft, and said the second field magnets are provided movably and freely with respect to the shaft, a concave part is provided to the side of said the first field magnet where the first field magnet and the second field magnet faces, and a protruding portion by which the function of said sleeve is held concurrently is provided to said second field magnet.

19. (Amended) The dynamo-electric machine according to claim 1, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of springs provided before and behind said field magnet, for guiding the rotary motion, the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

All Cont

20. (Amended) The dynamo-electric machine according to claim 1, wherein said first field magnet are fixed to the shaft, and said second field magnets are provided movably and freely with respect to the shaft, and the size of the airgap between said rotor having the second field magnet and said stator is larger than the size of the airgap between said rotor having the first field magnet.

21. (Amended) The dynamo-electric machine according to claim 1, wherein at least one or more field magnet are provided movably and freely with respect to the shaft, and said stopper and a movable mechanism of said stopper are provided inside said movable field magnet.

22. (Amended) The dynamo-electric machine according to claim 1, further comprising a mechanism for switching the direction of the

rotation of the power output shaft.

24. (Amended) The dynamo-electric machine according to claim 1, further comprising a third field magnet provided between the first and the second field magnets, having different polarity magnetic poles sequentially arranged in a rotation direction.

25. (Amended) The dynamo-electric machine according to claim 1, wherein said first and said second field magnets can move freely with respect to the shaft, and the screw functions are provided by forming a screw portion in the shaft in the same direction and nut portions inside said first and said second field magnets to form the mechanism for shifting one field magnet with respect to the other field magnet.

Please add the follow new claims 26-67 as follows:

--26. (new) The dynamo-electric machine according to claim 9, wherein at least one field magnet can move freely with respect to the shaft, the screw functions are provided by forming a screw portion in the shaft and nut portions inside the other field magnet,and a stopper is provided at the position spaced from the side of said movable field magnet.

27. (new) The dynamo-electric machine according to claim 26, wherein said stopper has a mechanism which can move in parallel to the shaft if necessary.

28. (new) The dynamo-electric machine according to claim 24, wherein said first and said second field magnets can move freely with respect to the shaft, and the screw functions are provided by forming a screw portion in the shaft in the same direction and nut portions inside said first and said second field magnets to form the mechanism for shifting one field magnet with respect to the other field magnet.

29. (new) The dynamo-electric machine according to claim 2, wherein the first field magnet and the second field magnet can move freely with respect to the shaft in axial and rotation directions, and the screw functions are provided by forming a screw portion in the shaft and nut portions inside the first and the second field magnets to form the mechanism for shifting both of the field magnets in axial and rotation directions.

30. (new) The dynamo-electric machine according to claim 4, wherein the first field magnet and the second field magnet can move freely with respect to the shaft in axial and rotation directions, and the screw

functions are provided by forming a screw portion in the shaft and nut portions inside the first and the second field magnets to form the mechanism for shifting both of the field magnets in axial and rotation directions.

31. (new) The dynamo-electric machine according to claim 5, wherein the first field magnet and the second field magnet can move freely with respect to the shaft in axial and rotation directions, and the screw functions are provided by forming a screw portion in the shaft and nut portions inside the first and the second field magnets to form the mechanism for shifting both of the field magnets in axial and rotation directions.

32. (new) The dynamo-electric machine according to claim 2, whereinone field magnet is fixed to the shaft and the other field magnet can move freely with respect to the shaft, and the screw functions are provided by forming a screw portion in the shaft and nut portions inside the other field magnet to form the mechanism for shifting one field magnet with respect to the other field magnet.

33. (new) The dynamo-electric machine according to claim 4, whereinone field magnet is fixed to the shaft and the other field

magnet can move freely with respect to the shaft, and the screw functions are provided by forming a screw portion in the shaft and nut portions inside the other field magnet to form the mechanism for shifting one field magnet with respect to the other field magnet.

34. (new) The dynamo-electric machine according to claim 5, whereinone field magnet is fixed to the shaft and the other field magnet can move freely with respect to the shaft, and the screw functions are provided by forming a screw portion in the shaft and nut portions inside the other field magnet to form the mechanism for shifting one field magnet with respect to the other field magnet.

35. (new) The dynamo-electric machine according to claim 2, wherein the phase lead of the current-feed by the controller for controlling said power converter is corrected according to the displacement of the position of a resultant magnetic pole of said first field magnet and said second field magnet.

36. (new) The dynamo-electric machine according to claim 4, wherein the phase lead of the current-feed by the controller for controlling said power converter is corrected according to the displacement of the position of a resultant magnetic pole of said first field magnet and said

second field magnet.

37. (new) The dynamo-electric machine according to claim 5, wherein the phase lead of the current-feed by the controller for controlling said power converter is corrected according to the displacement of the position of a resultant magnetic pole of said first field magnet and said second field magnet.

38. (new) The dynamo-electric machine according to claim 2, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, the screw functions are provided by forming a screw portion in the shaft and nut portions inside said field magnet, the magnitude of the displacement in an axial direction of said movable field magnet is detected, and the phase lead of the current-feed by the controller for controlling said power converter is corrected according to the displacement of the position of a resultant magnetic pole of said first field magnet and said second field magnet.

39. (new) The dynamo-electric machine according to claim 4, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, the screw functions are provided by forming a screw portion in the shaft and nut portions inside said field magnet, the magnitude of the displacement in an axial direction of said movable

field magnet is detected, and the phase lead of the current-feed by the controller for controlling said power converter is corrected according to the displacement of the position of a resultant magnetic pole of said first field magnet and said second field magnet.

40. (new) The dynamo-electric machine according to claim 5, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, the screw functions are provided by forming a screw portion in the shaft and nut portions inside said field magnet, the magnitude of the displacement in an axial direction of said movable field magnet is detected, and the phase lead of the current-feed by the controller for controlling said power converter is corrected according to the displacement of the position of a resultant magnetic pole of said first field magnet and said second field magnet.

41. (new) The dynamo-electric machine according to claim 2, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of support mechanisms for guiding the rotary motion, and whereby the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

42. (new) The dynamo-electric machine according to claim 4, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of support mechanisms for guiding the rotary motion, and whereby the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

43. (new) The dynamo-electric machine according to claim 5, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of support mechanisms for guiding the rotary motion, and whereby the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

44. (new) The dynamo-electric machine according to claim 2, wherein said movable field magnet and a sleeve are fixed through the sleeve between the inside of said movable field magnet and the shaft.

45. (new) The dynamo-electric machine according to claim 4, wherein said movable field magnet and a sleeve are fixed through the sleeve between the inside of said movable field magnet and the shaft.

46. (new) The dynamo-electric machine according to claim 5, wherein said movable field magnet and a sleeve are fixed through the sleeve between the inside of said movable field magnet and the shaft.

47. (new) The dynamo-electric machine according to claim 2, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of springs provided before and behind said field magnet, for guiding the rotary motion, the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

48. (new) The dynamo-electric machine according to claim 4, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of springs provided before and behind said field magnet, for guiding the rotary motion, the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

49. (new) The dynamo-electric machine according to claim 5, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of springs provided before and behind said field magnet, for guiding the rotary motion, the

reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

50. (new) The dynamo-electric machine according to claim 2, wherein said the first field magnet are fixed to the shaft, and said the second field magnets are provided movably and freely with respect to the shaft, a concave part is provided to the side of said the first field magnet where the first field magnet and the second field magnet faces, and a protruding portion by which the function of said sleeve is held concurrently is provided to said second field magnet.

51. (new) The dynamo-electric machine according to claim 4, wherein said the first field magnet are fixed to the shaft, and said the second field magnets are provided movably and freely with respect to the shaft, a concave part is provided to the side of said the first field magnet where the first field magnet and the second field magnet faces, and a protruding portion by which the function of said sleeve is held concurrently is provided to said second field magnet.

52. (new) The dynamo-electric machine according to claim 5, wherein said movable field magnet and a sleeve are fixed through the sleeve between the inside of said movable field magnet and the shaft.

53. (new) The dynamo-electric machine according to claim 2, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of springs provided before and behind said field magnet, for guiding the rotary motion, the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

54. (new) The dynamo-electric machine according to claim 4, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of springs provided before and behind said field magnet, for guiding the rotary motion, the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

55. (new) The dynamo-electric machine according to claim 5, wherein at least one or more field magnets are provided movably and freely with respect to the shaft, and a plurality of springs provided before and behind said field magnet, for guiding the rotary motion, the reciprocal motion and the compound movement are provided between said movable field magnet and said shaft.

56. (new) The dynamo-electric machine according to claim 2, wherein said first field magnet are fixed to the shaft, and said second field magnets are provided movably and freely with respect to the shaft, and the size of the airgap between said rotor having the second field magnet and said stator is larger than the size of the airgap between said rotor having the first field magnet.

57. (new) The dynamo-electric machine according to claim 4, wherein said first field magnet are fixed to the shaft, and said second field magnets are provided movably and freely with respect to the shaft, and the size of the airgap between said rotor having the second field magnet and said stator is larger than the size of the airgap between said rotor having the first field magnet.

58. (new) The dynamo-electric machine according to claim 5, wherein said first field magnet are fixed to the shaft, and said second field magnets are provided movably and freely with respect to the shaft, and the size of the airgap between said rotor having the second field magnet and said stator is larger than the size of the airgap between said rotor having the first field magnet.

59. (new) The dynamo-electric machine according to claim 2, wherein

at least one or more field magnet are provided movably and freely with respect to the shaft, and said stopper and a movable mechanism of said stopper are provided inside said movable field magnet.

60. The dynamo-electric machine according to claim 4, wherein at least one or more field magnet are provided movably and freely with respect to the shaft, and said stopper and a movable mechanism of said stopper are provided inside said movable field magnet.

61. The dynamo-electric machine according to claim 5, wherein at least one or more field magnet are provided movably and freely with respect to the shaft, and said stopper and a movable mechanism of said stopper are provided inside said movable field magnet.

62. (new) The dynamo-electric machine according to claim 2, further comprising a mechanism for switching the direction of the rotation of the power output shaft.

63. (new) The dynamo-electric machine according to claim 4, further comprising a mechanism for switching the direction of the rotation of the power output shaft.

64. (new) The dynamo-electric machine according to claim 5, further comprising a mechanism for switching the direction of the rotation of the power output shaft.

65. (new) The dynamo-electric machine according to claim 2, further comprising a third field magnet provided between the first and the second field magnets, having different polarity magnetic poles sequentially arranged in a rotation direction.

66. (new) The dynamo-electric machine according to claim 4, further comprising a third field magnet provided between the first and the second field magnets, having different polarity magnetic poles sequentially arranged in a rotation direction.

67. (new) The dynamo-electric machine according to claim 5, further comprising a third field magnet provided between the first and the second field magnets, having different polarity magnetic poles sequentially arranged in a rotation direction.--